

EPA cracks down on Clean Water Act

The impact of contaminated water on marine life is getting more and more scrutiny in the United States, making power washing an increasing concern among marina owners and operators.

Last October, the Environmental Protection Agency (EPA) announced it would be 'stepping up its efforts on Clean Water Act enforcement'. The positive news is that the EPA appears to be focusing on various pollution sources such as concentrated animal feeding operations, sewer overflows, contaminated water that flows from industrial facilities, construction sites and run-off from urban streets.

"A bright spot in this enforcement initiative is that the real pollution sources - agriculture, urban run-off, failing sewer systems - are finally being listed as priority targets by EPA and boats seem to have slipped further down that priority list," says Wendy Larimer, legislative coordinator for the Association of Marina Industries.

There has been some talk about a former marina owner on the Yaquina River in Oregon who was fined for violating the Clean Water Act even though he was considered to be only minimally responsible for the existing pollution. But, this was back in 2004 and the area is currently benefiting from some area clean-up as a result.

Meanwhile, the Connecticut Marine Trades Association (CMTA) negotiated with the Department of Environmental Protection to push compliance deadlines for recycled water and processed water run-off from power-wash systems, and the CMTA offers guidelines and assistance in order to ensure its members will pass inspection when the deadline hits in late 2010.

"This makes people feel that the regulations are new, but they're not," says Kellie Thornell- Crete of Ink, Inc. "Just the focus is new."

The news is not as dire as it would seem. Michael Keyworth of the Rhode Island Marine Trade Association acknowledges potential federal funding opportunities are possibly coming through the pipeline, which could offer tax relief and grants for boat yards and marinas to sufficiently comply with old and newly enforced regulations.

With the EPA now enforcing long existing regulations, the buzz is that even tap water is considered a hazardous material - although it's pretty unlikely the agency will enforce that. Marina owners and operators in the United States are (or soon will be) very much aware of the environmental and permitting requirements surrounding wastewater, pressure washing and wash pads.

"Greater enforcement of the Clean Water Act can be good for our industry in that we all will only survive if the waters we boat on are clean," says Larimer. "However, there is a real threat of increased regulation and cost to marinas, which is an additional challenge we don't need right now."

Sarah Devlin



Pressure-washing the clean way

Clean Marine Solutions (CMS) of North Carolina, USA, has recently introduced a water-treatment system for marinas that pressure-wash hulls. In a nutshell, the system, Vanish 300, reduces 50 gallons of wastewater to half a cup of dried precipitate.

With no discharge, the Vanish 300 mitigates the cost for additional holding tanks and the expense of hiring a licensed waste hauler. And, with no wastewater, the system requires no wastewater permit - at least not in North Carolina, according to the North Carolina Division of Water Quality (DWQ) which called the system 'deemed permitted'. "The DWQ is prohibited from directly endorsing a private company, but our compliance plan will save a marina thousands in time, headaches and permitting costs because we have done 95% of the work," says CMS owner, David Flagler.

It comes down to this. Water from pressure-washing is collected on a contaminant pad and drained into the treatment system that, through a system of chemical balance and evaporative technology, turns the copper-laden water into a clear solution with the metals and contaminants separated and settled on the bottom. The settled solids sit on a drying pad and after a day or two can be disposed of according to local permitting regulations.

Although Flagler contends everyone has a 'cradle to grave responsibility', in most cases the system may not require a discharge permit. "I would advise yards to get a permit to dispose of the materials exactly how local municipalities mandate," Flagler insists, "but the Vanish 300 is guaranteed to meet municipal discharge requirements."

"We tried to anticipate what the EPA and state divisions of water quality would do and where they would move. We guessed right," he adds.

"In Connecticut, if a boatyard's recycle system cannot reduce the level of copper to 1.3 ppm, they will have to build a screen to prevent overspray from contaminating the surrounding land and water. Can you imagine what a headache that would be? Our system removes 99% of the copper."

"Most recycle units are designed to filter out solids and control odour," Flagler continues. "Heretofore they haven't been concerned with getting copper content down to low levels. A lot of material settles to the bottom, but [with these other systems] unacceptable levels of copper will be in the solution."

The Vanish 300 clarifier forces a chemical electrical balance in the water that allows the copper to settle out of the solution. "Basically, we took the process used by many water treatment plants and tailored it for marina conditions and boatyard metals."

"Someone from the DWQ suggested we mark the wastewater as 'not potable' since it's so clear," Flagler laughs.

With the 110v system running full blast for a 40-hour work week, electricity expenses would be less than US\$10 per week. Flagler claims the Vanish 300 would pay for itself at an average-sized marina in about two years.

Contact Clean Marine Solutions LLC in NC, USA on email:

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Vanish 300 removes contaminants to leave clear water:

